 00157014

DATA EVALUATION RECORD

1. Chemical: BAS-317

2. Test Material: Technical

3. Study Type: Honeybee acute contact $LD_{50}$

   Species tested: Apis mellifera

4. Study ID: Atkins, E.L., D. Kellum, and K.J. Neuman (1976) Project No. 1499, 1976 Annual Report. File Symbol 372-AU. Accession Number 261692.

5. Reviewed By: Allen W. Vaughan, Entomologist, EEB/HED — Signature: Allen W. Vaughan — Date: 6/24/86

6. Approved By: Norman Cook, Supervisory Biologist, EEB/HED — Signature: Norman Cook — Date: 6.24.86

7. Conclusions:

   This study is scientifically sound. With a 48-hour $LD_{50}$ greater than 181 micrograms per bee, BAS-317 is considered essentially nontoxic to honeybees.

   This study fulfills the Guideline requirement for an acute contact toxicity test on honeybees with the technical grade of the pesticide.

8. Recommendations: N/A.

9. Background:

   This study was submitted by the registrant in support of registration.

10. Discussion of Individual Test: N/A.

11. Materials and Methods:

a. Test Animals: worker honeybees, Apis mellifera, obtained from university colonies.

Test System: BAS-317 was blended with a nontoxic dust diluent, pyrolite; dust mixture was distributed over bees in cages using a bell jar duster. Dusted bees were transferred into clean holding cages and provided with 50% honey/water solution. Bees were kept at 80° F and 65% relative humitidy.

b. Dose: Dust application using bell jar; pyrolite dust dilutent.

c. Design: Approximately 100 bees per dose level and control, divided into 3 reps.; replicated 3 times over time.

d. Statistics: Due to very low mortality, no analysis was performed.

12. Reported Results:

The study authors found that BAS-317 was nontoxic to honeybees at the highest dosage tested (181.29 micrograms per bee). Thus, $LD_{50}$ value is determined to be greater than 181.29 micrograms per bee.

13. Study Author's Conclusions/QA Measures:

48-hour $LD_{50}$ greater than 181.29 micrograms per bee (technical material).

14. Reviewer's Discussion and Interpretation of the Study:

a. Test Procedures: Test procedures were in accordance with protocols recommended in the Guidelines. There were no problems in this regard.

b. Statistical Analysis: Due to very low mortality at all treatment levels, no analysis was performed.

c. Discussion/Results: With a 48-hour acute contact $LD_{50}$ greater than 181.29 micrograms per bee, BAS-317 technical is practically nontoxic to honeybees.

d. Adequacy of Study:

(1) Classification = Core.
(2) Rationale: Guidelines protocol; technical grade ai test.
(3) Reparability: N/A.

15. Completion of One-Liner For Study: N/A.

16. CBI Appendix: N/A.